Operators Manual

Caliber .223
(5.56mm)

In a world of compromise, some don't.

HK SL8-1 Rifle

CAUTION: Read the safety notes before handling the SL8-1 Rifle!

SL8-1

Sporting Rifle
Operators Manual

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Safety Notes on the Use of the HK SL8-1

Clear the rifle! Before handling the firearm, "clear it!" Do so by:

1 • Make sure fingers are outside of the trigger guard and the firearm is pointed in a safe direction at all times!

2 • ON SAFE – Rotate the safety/selector lever to the "Safe" position (the white "S" adjacent to the safety/selector lever)

3 • REMOVE MAGAZINE – Depress the magazine paddle release lever and remove the magazine from the magazine well.

4 • COCKING LEVER – Rotate the ejection port towards the ground and fold out and pull the cocking lever rearward one or more times to insure the chamber is empty. Watch for a live round or empty case to be ejected. Move the cocking lever upward slightly and lock it into the indent in the cocking lever housing to lock the bolt open.

5 • BOLT CATCH – While holding the cocking lever fully rearward use the trigger finger to press upwards on the bolt catch button located in the front top corner of the trigger guard to lock the bolt rearward.

6 • INSPECT CHAMBER – Inspect chamber for the presence of a live round or empty case.
Visually – View chamber through open ejection port.
Physically – Insert index finger through magazine well or ejection port and feel for the presence of a round or cartridge case in the chamber.

7 • Remove any live rounds or empty cases from the chamber or from within the firearm or magazine before handling the firearm further.

The HK SL8-1 is now considered "Clear.

WARNINGS

- **Carefully read this operators manual before handling the rifle.**
- **Only use the rifle after you have fully reviewed and understand these instructions.**
- **Observe all notes on handling and operation. Failure to do so may result in injury or death of the operator or bystanders.**
- **Do not use the rifle if you have previously ingested alcohol or drugs.**
- **When passing the rifle between persons, the firearm must be clear and the bolt should be open.**
- **Always treat the rifle as if it were loaded and ready to fire.**
- **Never point the rifle at anyone during handling.**

- **Always point the rifle in a safe direction.**
- **Before handling and before cleaning it has to be checked to ensure that:**
  - The bolt is locked to the rear
  - The rifle is unloaded (cartridge chamber empty)
  - The barrel is free of obstructions
  - The magazine is empty.
- **Keep your finger off the trigger when loading, unloading or otherwise handling the rifle. Always place the trigger finger outside of the trigger guard.**
- **Place your finger on the trigger only when your sights are aimed at the target.**
- **Never use force when handling, disassembling, cleaning and assembling the rifle.**
- **Disassemble the rifle only as far as described in this manual.**
- **Always wear eye and hearing protection when using the rifle.**
- **Take into account the fact that bystanders are also endangered. Ensure bystanders are also wearing ear and eye protection.**
- **Only use factory-loaded and undamaged cartridges of the correct caliber.**
- **Always mind that the muzzle area is free of obstacles during firing.**
- **Store the firearm and ammunition in separate places.**
- **Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to be associated with birth defects, reproductive harm, and other serious injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.**
- **Heckler & Koch does not assume any liability for events due to disregarding this manual, improper handling, negligence, improper treatment, use of improper or reloaded ammunition, unauthorized exchange of parts or manipulations of the rifle.**
- **Remember, firearms safety begins with you. Read this operators manual and be familiar with the safe handling of this firearm before using it. Store all firearms in a safe and secure location. Keep firearms away from children. Always be a safe shooter. Keep this manual with the rifle.**

The HK SL8-1 semiautomatic rifle is a caliber .223 Remington civilian sporting arm based on the G36 rifle currently used by the German Army.

The SL8-1 rifle is gas operated with a rotating bolt head. Its receiver, pistol grip, buttstock, and handguard are all made of a high-strength polymer material, resulting in a tough and lightweight rifle.

A mechanical sight is mounted on the Picatinny long rail found on the top of the upper receiver. This sighting system can be easily replaced by other sighting systems, including optical scopes.

A movable buttplate and cheekpiece are other features that can be adjusted to the individual needs of the user.

The heavy barrel and the chamber are cold hammer forged and hard chrome plated for durability and accuracy. The barrel is fastened and centered to the receiver by means of a hex nut.

A cocking lever on the front end of the bolt head carrier can be swiveled to the left and to the right for actuation by both left and right handed users.

The magazine holds 10 rounds.

A bolt catch locks the bolt rearward (open) when the last round is fired or an empty magazine is inserted and the bolt is retracted.

Figure 1 SL8-1 with mechanical sights (left side view)

Figure 2 SL8-1 with mechanical sights (right side view)

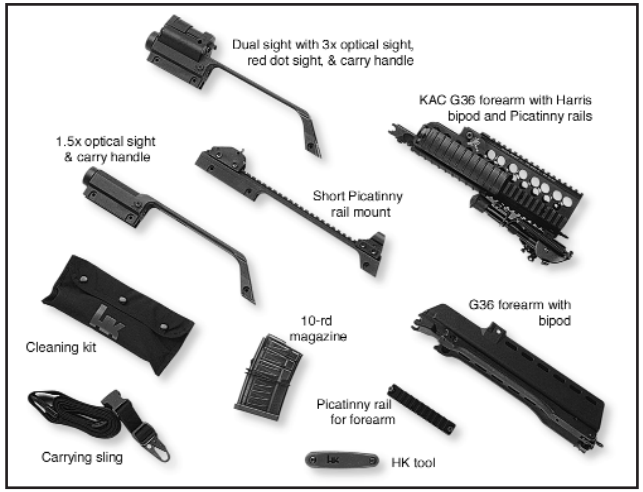
Dual sight with 3x optical sight, red dot sight, & carry handle
KAC G36 forearm with Harris bipod and Picatinny rails
1.5x optical sight & carry handle
Short Picatinny rail mount
Cleaning kit
10-rd magazine
G36 forearm with bipod
Picatinny rail for forearm
Carrying sling
HK tool

Figure 3 SL8-1 Accessories

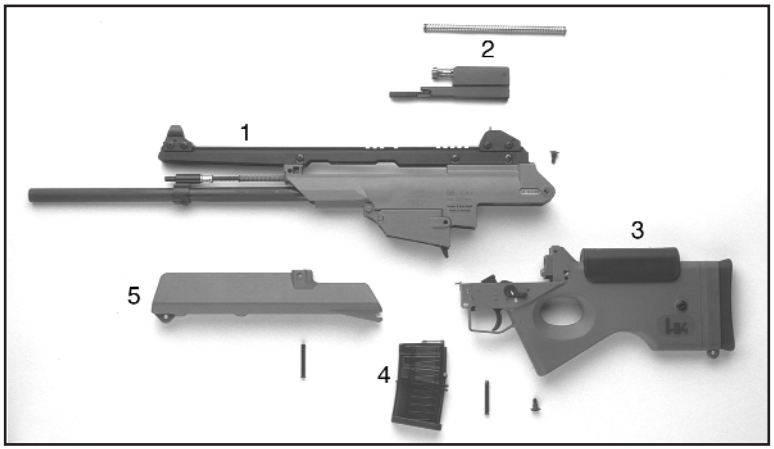

Figure 4 SL8-1 Assembly groups

1 Receiver with barrel, gas system, magazine well, mounting rail with mechanical sights
2 Bolt assembly with recoil spring assembly
3 Buttstock assembly complete
4 Magazine
5 Handguard

Group 1 Receiver with barrel, buttstock and attaching parts
The receiver is made of high-strength fiber-reinforced plastic. It houses all the other assembly groups. Inside the receiver there are guideways for the bolt as well as contact surfaces for the pistol grip, the buttstock and the magazine well. The barrel is fastened and centered to the receiver by means of a nut.

CAUTION: The barrel nut should not be removed by the operator. Only HK certified armorers should attempt to remove the barrel.

On the right side of the receiver is an ejection port with an integral cartridge case deflector. The cartridge case deflector directs the ejected cases (at an angle of approximately 45° to the muzzle) away from the shooter.

Handguard and magazine well are fitted to the bottom of the receiver by means of removable locking pins.

The buttstock with trigger mechanism is fastened to the receiver by means of two hex head screws. To fasten and unfasten them use the HK special tool provided with the rifle.

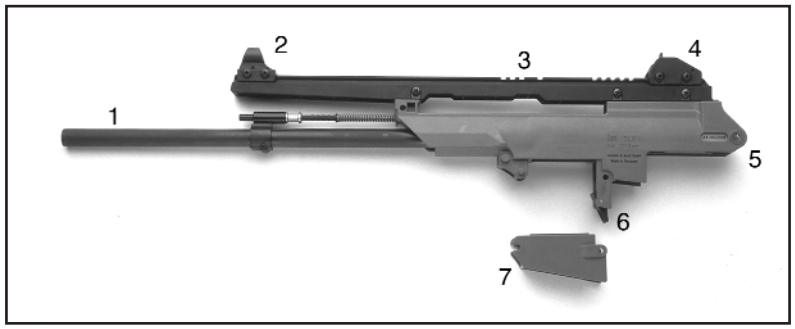

Figure 5
Receiver with barrel, gas system, mounting rail with mechanical sights

1. Barrel
2. Front sight
3. Mounting rail
4. Rear sight
5. Receiver
6. Magazine catch
7. Magazine well

Gas block
The gas block is fastened with a cross pin to the barrel; do no attempt to remove it. After the bullet has passed the gas vent hole in the barrel, a portion of the propellant gases are guided into the gas cylinder within the gas block and actuate the gas piston.

The gas piston drives the bolt assembly rearward via the push rod. The return spring on the push rod returns the rod to its starting position.

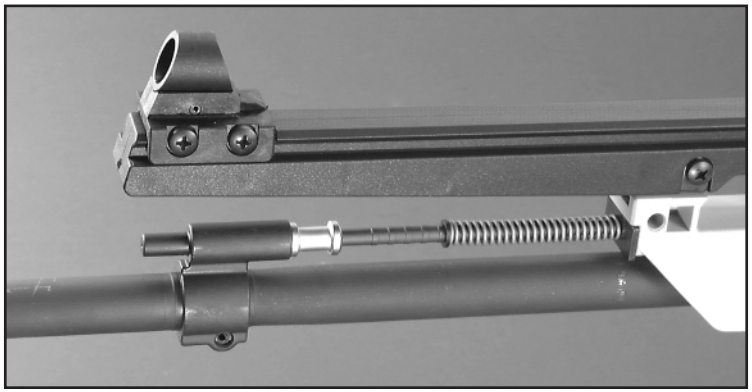

Figure 6 Gas system

Magazine well
The front of the magazine well engages into two support studs on the receiver. For fastening the magazine well is swiveled upward. A locking pin fastens both the pistol grip and the magazine well to the receiver. When the locking pin is removed the magazine well is retained by the magazine catch.

Group 2 Bolt assembly
The bolt assembly with the rotary bolt head is guided into the receiver by metal guide rails molded into the polymer receiver. The bolt assembly is driven rearward by the gas piston and forward by the recoil spring.The bolt assembly serves multiple functions including; feeding the cartridges, locking of the chamber, cartridge ignition, case extraction and ejection, as well as for cocking of the hammer.

The bolt head is retained in the bolt head carrier by the cam pin which also controls its rotary movement. Locking lugs are machined onto the front of the bolt head. The spring-loaded extractor is located in a gap between the locking lugs. Adjacent to the extractor is a spring-loaded ejector.

The firing pin is retained by the firing pin retaining pin.

A cocking lever on the front end of the bolt head carrier can be swiveled to the left and to the right for actuation by both left and right handed users. It can also be locked in a 90° position to the left and right for use as a forward assist.

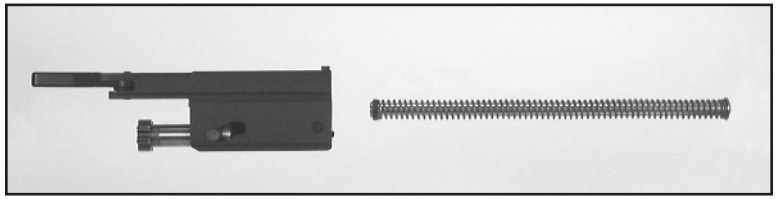

Figure 7 Bolt assembly with recoil spring assembly

The recoil spring guide rod with the recoil spring is a separate unit and fits into the bolt head carrier. Rearward movement of the bolt assembly is stopped by a buffer in the buttstock.

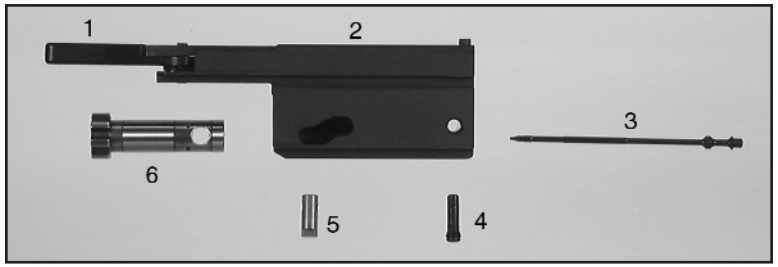

Figure 8 Bolt assembly

1. Cocking lever
2. Bolt head carrier
3. Firing pin
4. Retaining pin
5. Cam pin
6. Bolt head

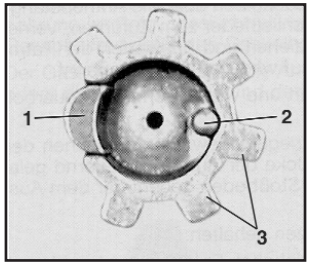

Figure 9 Bolt head

1. Extractor
2. Ejector
3. Locking lugs (6 total)

Buttstock Assembly, complete
The buttstock is fixed to the receiver by the means of two hex head screws which can be opened and closed with the HK Tool. The buttstock includes an integral rear sling attachment point.

Butt plate and cheekpiece can be adjusted to the individual requirement of the user by the means of spacers.

The trigger and safety/selector lever is located at the front end of the buttstock.

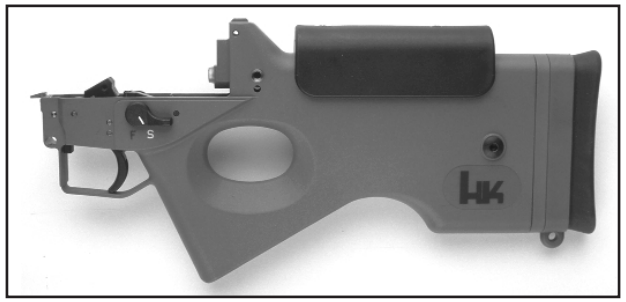

Figure 10 Buttstock assembly complete

Figure 11
Cheekpiece

Figure 12
Buttplate with interchangeable spacers

Trigger and Safety Mechanism
The trigger and safety are integrated into the buttstock assembly.

At the front of the trigger guard there is a bolt catch button which is used to hold the bolt open on an empty magazine or when fired "dry." There are safety selector levers on both sides of the grip. The safety/selector levers can be placed in two positions:

"S" = Safe (white index line on the safety/selector lever pointing to the white "S")
"F" = Fire (semi-automatic white index line on the safety/selector lever pointing to the red "F")

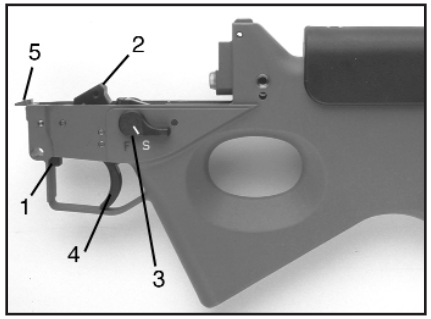

Figure 13 Trigger and safety mechanism

1. Bolt catch button
2. Hammer
3. Safety/selector lever
4. Trigger
5. Bolt catch

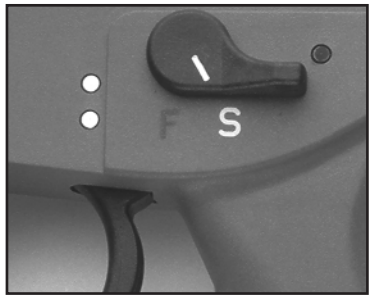

Figure 14A Safety/selector position "safe"

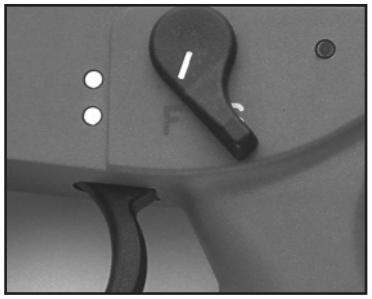

Figure 14B Safety/selector position "fire" (semi-automatic)

Handguard
The detachable handguard encloses the barrel and the gas system. The handguard is positioned at the receiver by means of two support studs and is fastened there by means of a removable locking pin. The handguard incorporates a sling attachment point and two threaded hard points for accessory attachment.

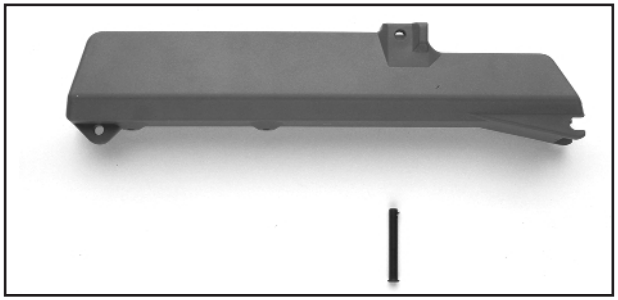

Figure 15 Handguard

Magazine
The detachable box-type magazine holds maximum 10 rounds. The magazine housing consists of impact-resistant transparent plastic which allows the user to visually check the contents of the magazine from the outside.

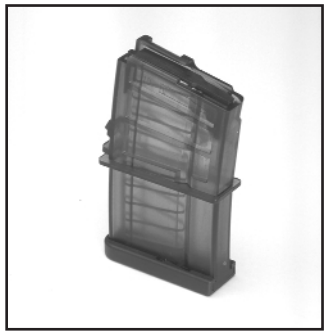

Figure 16 Magazine

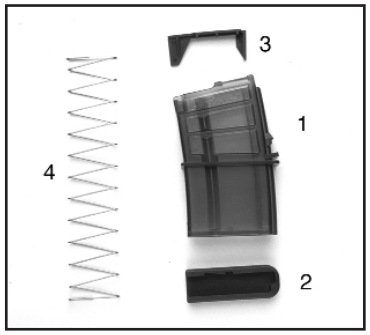

Figure 17 Magazine disassembled

The magazine consists of:
1. Magazine housing
2. Magazine floor plate
3. Follower
4. Follower spring

Ammunition and Accuracy
By using ammunition with match bullets (like Sierra 62 grain Match King #1410) or other match grade ammunition the HK SL8-1 will achieve the best level of accuracy.

If used, handloaded ammo should not exceed the maximum gas pressure specified by C.I.P. and SAAMI for the cal. 223 Remington cartridge (5.56 x 45mm NATO). Follow the instructions of propellant and bullet manufacturer.

Mounting Rail
The rail with mechanical iron sights is not designed to be a carrying handle.

CAUTION: Except for loading and unloading the rifle there should be no finger placed between the rail and the receiver.

NOTE: If the bolt is locked to the rear by the bolt catch and the magazine is removed, a hard knock on the buttstock, like slamming the gun to the ground will release the bolt. However, to avoid damage to the rifle, the bolt should be pulled fully rearward and released.

Safe handling
Compared to the military issue G36 assault rifle, the trigger pull of the SL8-1 is significantly reduced. If the weapon is loaded, avoid rough handling and drops.

Because of the absence of a firing pin spring, a slight mark on the primer can be seen after chambering a round. This has no influence on the handling safety of the rifle; without pulling the trigger the gun will not fire. Please avoid chambering the same round several times in sequence as the bullet can be worked loose from the cartridge.

NOTE: Use only .223 Remington or 5.56 x 45mm NATO ammunition in the SL8-1 rifle. Damage caused by the use of improperly assembled or remanufactured ammunition in the SL8-1 may void the HK Warranty. Do not use ammunition assembled with corrosive components (primers, propellants, etc.).

Cartridges assembled with projectile weights from 50-70 grains are recommended for use with the SL8-1 rifle.

Loading of the magazine

1 • Hold the magazine with one hand. Place a cartridge with the other hand slightly forward of the the magazine lips and push back and downward until the cartridge is held underneath the lips.

2 • Repeat this operation until the magazine is fully loaded and the desired 10 rounds are inside the magazine.

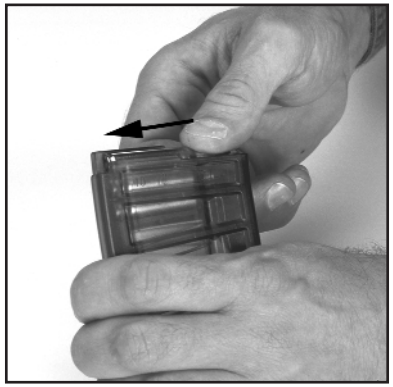

Figure 18 Loading of the magazine

Unloading the magazine

Hold the magazine with one hand. Push the cartridges forward out of the magazine with the thumb of the other hand. Do not allow the cartridges to drop on a hard surface or they may become damaged.

Loading the Rifle

Method 1: No magazine in the weapon
The bolt is in its forward (locked) position

1 • Set the safety/selector lever on “Safe.”

2 • Swivel the cocking lever to the left or to the right, pull it all the way to the rear (Figure 20) and hold it.

Figure 20 Operating the cocking lever

3 • Push the bolt catch button upward to lock the bolt open (rearward, see Figure 21)

Figure 21 Activate bolt catch, push upwards

4 • Insert a loaded magazine into the magazine well until the magazine catch clearly engages. Swivel the cocking lever out, pull it all the way to the rear and release it.

The weapon is now loaded and set on “Safe.”

Reloading the Rifle

Method 2: The magazine in the weapon is empty.
The bolt has been held in its rear position by the bolt catch.

1 • Set the safety/fire selector lever at “Safe.”
2 • Push the magazine catch forward with the thumb and remove the empty magazine (see Figure 22 below).

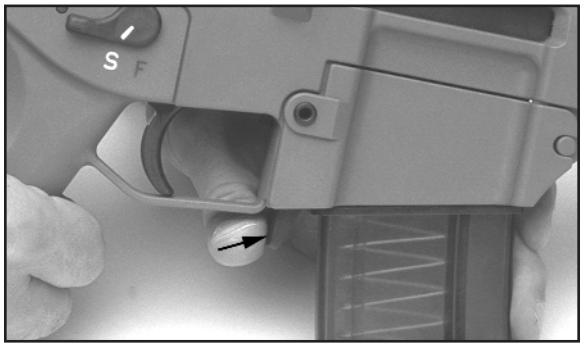

Figure 22 Release magazine (push forward)

3 • Insert a loaded magazine into the magazine well until the magazine clearly engages. Tug on the magazine to ensure it is securely engaged.
4 • Swivel the cocking lever out, pull it all the way to the rear and release (see Figure 20).

The weapon is now loaded and set on “Safe.”

Forward assist

If the exterior of the rifle is very dirty (sand, mud etc.) the cocking lever can also be used as a forward assist.

To use the cocking lever as a forward assist

1 • Swivel out the cocking lever and push it inward against the bolt head carrier (the cocking lever remains in its swiveled position).
2 • Push the bolt head carrier with the cocking lever forward until it fully locks closed.
3 • Pull the cocking lever outward and let it swivel to its initial position (parallel with the bolt head carrier).

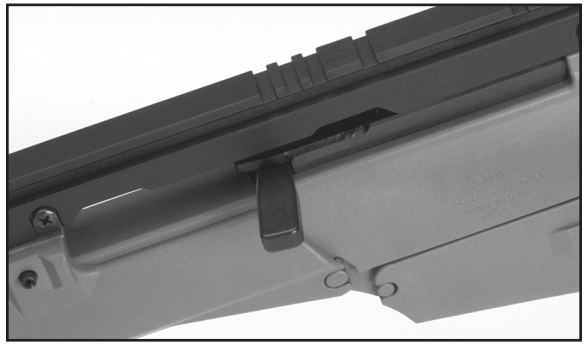

Figure 23 Cocking lever shown in its “forward assist” position

Low-noise loading using the forward assist

1 • After the magazine has been inserted, swivel out the cocking lever and push it inward against the bolt head carrier until it engages (see Figure 23).
2 • Pull the cocking lever slightly to the rear and guide it forward.
3 • Push the cocking lever forward until the bolt locks.
4 • Pull the cocking lever outward and let it swivel to its initial position (parallel with the bolt head carrier).

The rifle is now loaded and set at “Safe.”

WARNING: Never fire the SL8-1 with cocking handle locked in the 90° forward assist position or injury may occur.

Bolt Locked

The barrel is tightly screwed to the barrel extension by means of a nut. The bolt head carrier houses the bolt head which can move along its longitudinal axis inside the bolt head carrier. Additional to its longitudinal movement the bolt head can also rotate around its longitudinal axis.

In the locked condition the bolt head is in the foremost position. The bolt head in the bolt head carrier is turned in such a way that the locking recesses of the bolt head engage the corresponding locking lugs of the barrel extension.

The SL8-1 is now loaded and safety selector lever set to fire.

Pulling the trigger releases the hammer which hits the firing pin and ignites the cartridge.

The propellant gases accelerate the bullet. As soon as the bullet has passed the gas vent hole, a portion of the gases enter the gas block and the gas cylinder.

These gases push the bolt head carrier via the gas piston and the push rod to the rear. The camming slot in the bolt head carrier causes the cam pin to pivot downward, which in turn rotates the bolt head and unlocks it.

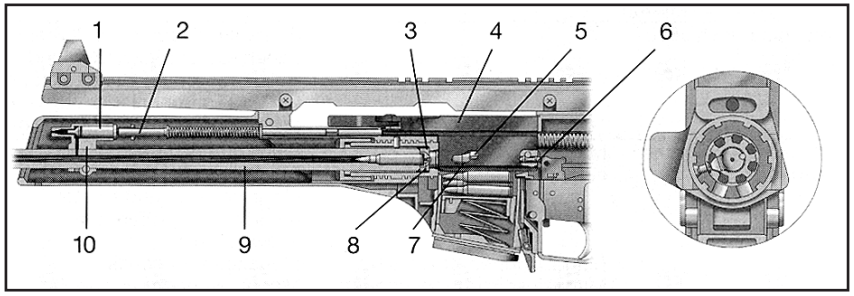

Figure 24 Bolt in locked position

1. Gas piston
2. Push rod
3. Bolt head
4. Bolt head carrier
5. Cam pin
6. Firing pin
7. Camming slot
8. Barrel extension
9. Barrel
10. Gas Block

Bolt Unlocked

The locking lugs disengage. The bolt head disengages (unlocks) from the barrel extension. Bolt head carrier and bolt head move to the rear. The extractor in the bolt head extracts the cartridge case by its rim from the chamber. When the bolt assembly passes the ejection port, the spring-loaded ejector ejects the cartridge case through the open ejection port forward and to the right.

The rearward movement of the bolt assembly compresses the recoil spring and cocks the hammer.

If the magazine is empty, the follower lifts the bolt catch upwards which holds the bolt rearward. If a round is present in the magazine, the bolt assembly, driven by the recoil spring moves forward and pushes the uppermost cartridge out of the magazine into the chamber.

The bolt head contacts and stops at the rear face of the barrel and the bolt head carrier continues its forward movement which rotates the bolt head via the cam pin and the camming slot into the locked position.

The firing pin tip can only protrude through the bolt face and hit the primer when the bolt is fully locked. The weapon is now ready to fire again.

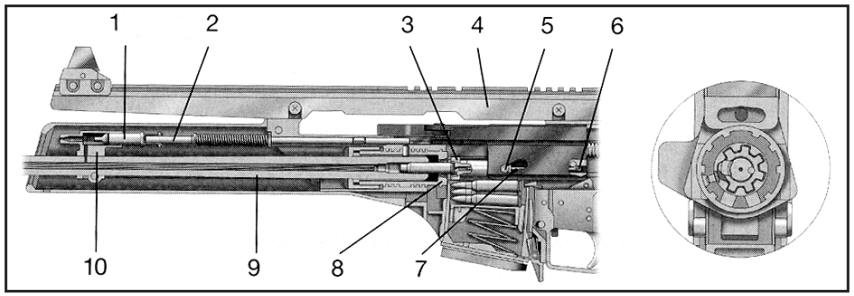

Figure 25 Bolt in the unlocked position

1. Gas piston
2. Push rod
3. Bolt head
4. Bolt head carrier
5. Cam pin
6. Firing pin
7. Camming slot
8. Barrel extension
9. Barrel
10. Gas block

Clear the rifle! Before handling the firearm, "clear it!" Do so by:

1 • Make sure fingers are outside of the trigger guard and the firearm is pointed in a safe direction at all times!
2 • ON SAFE – Rotate the safety/selector lever to the "Safe" position (the white "S" adjacent to the safety/selector lever)
3 • REMOVE MAGAZINE – Depress the magazine paddle release lever and remove the magazine from the magazine well.
4 • COCKING LEVER – Rotate the ejection port towards the ground and fold out and pull the cocking lever rearward one or more times to ensure the chamber is empty. Watch for a live round or empty case to be ejected.
5 • BOLT CATCH – While holding the cocking lever fully rearward use the trigger finger to press upwards on the bolt catch button located in the front top corner of the trigger guard to lock the bolt rearward.
6 • INSPECT CHAMBER – Inspect chamber for the presence of a live round or empty case.
Visually – View chamber through open ejection port.
Physically – Insert index finger through magazine well or ejection port and feel for the presence of a round or cartridge case in the chamber.
7 • Remove any live rounds or empty cases from the chamber or from within the firearm or magazine before handling the firearm further.

The HK SL8-1 is now considered "Clear." Once clear, let the bolt move forwards.

NOTE: The SL8-1 is easily disassembled and reassembled with the HK Tool. Do not use force in any of the disassembly procedures. Disassembly beyond the procedures outlined in this manual is not recommended and may void the HK Warranty. Disassembly beyond the operators level described here may be carried out by qualified maintenance personnel only. Contact HK for more information.

Stripping into assembly groups

1 • Use the 5 mm Allen wrench of the HK tool and remove the hex headed Allen screws located on the left and right sides of at the rear end of the receiver
2 • Remove the locking pin above the front end of the trigger guard.
3 • Pull buttstock with trigger back out of the receiver.
4 • Pull the cocking lever to the rear and remove the bolt.
5 • Pull out the locking pin at the handguard and remove the handguard to the front.
6 • Push the magazine catch, swivel the magazine well downward and detach.

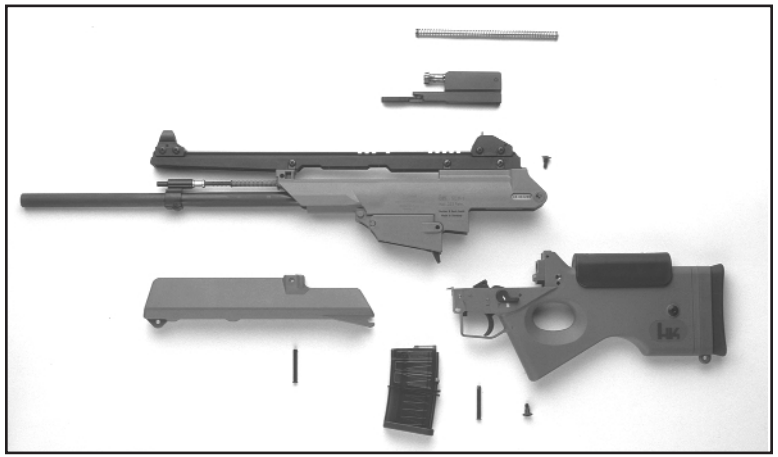

Figure 26 Stripping SL8-1 into assembly groups

Disassembly of the push rod and the gas piston

CAUTION: The push rod is under considerable spring tension. Use caution when installing and removing it. To avoid injury to yourself and others, never point the compressed push rod in an unsafe direction in the event it is inadvertently released under pressure.

1 • Push the push rod to the rear against spring pressure and remove it from the gas piston.
2 • Swivel the push rod to the side and remove it to the front.
3 • Remove the gas piston to the rear.

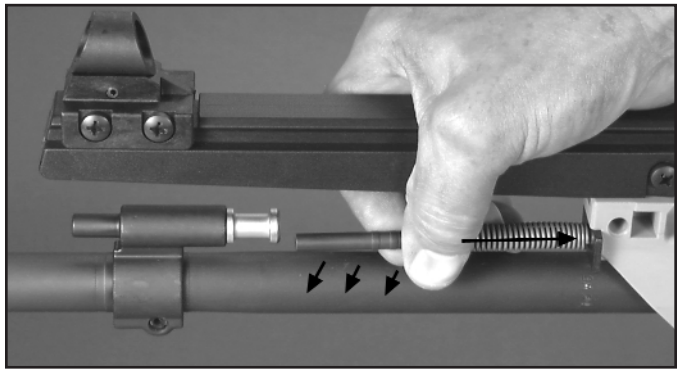

Figure 27 Removing push rod

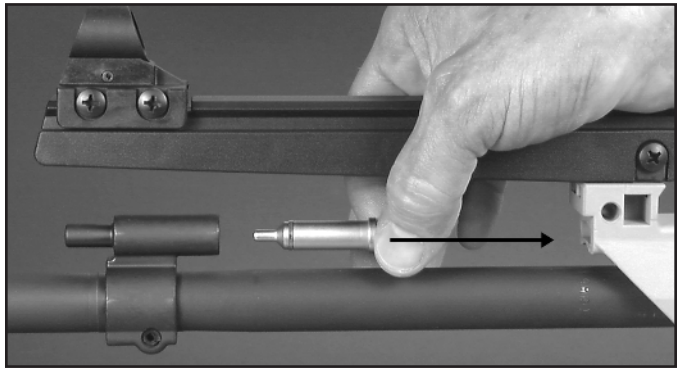

Figure 28 Removing the gas piston

Disassembly of the bolt assembly

1 • Push the firing pin retaining pin to the left (e.g. with gas piston) and detach.
2 • Remove the firing pin to the rear.
3 • Take out the cam pin to the left.
4 • Detach the bolt head to the front.

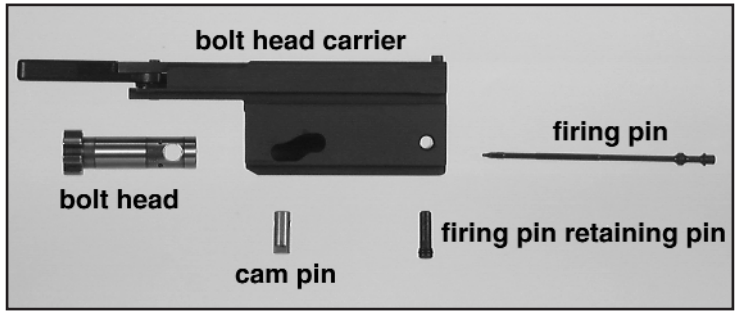

Figure 29 Bolt head disassembled

Assembly of the bolt

1 • Slide the bolt head with the extractor on the right, as viewed from the rear, into the bolt head carrier.
2 • Insert the cam pin from the left into the bolt head carrier and the bolt head; mind that the flat surfaces on the cam pin and the hole for the firing pin are parallel to the bore.
3 • Introduce the firing pin from the rear into the bolt head carrier and the bolt head.
4 • Insert the firing pin retaining pin from the left side into the bolt head carrier to secure the firing pin and cam pin in place.
5 • Determine that all parts are assembled in proper sequence and complete and that the bolt head and cam pin moves freely within the bolt head carrier.

Assembly of the gas system

1 • Insert the gas piston into the gas block.
2 • Introduce the push rod into the front part of the receiver, push it against the spring pressure into the receiver and let it slide into the gas piston.

CAUTION: The push rod is under considerable spring tension. Use caution when installing and removing it. To avoid injury to yourself and others, never point the compressed push rod in an unsafe direction in the event it is inadvertently released under pressure.

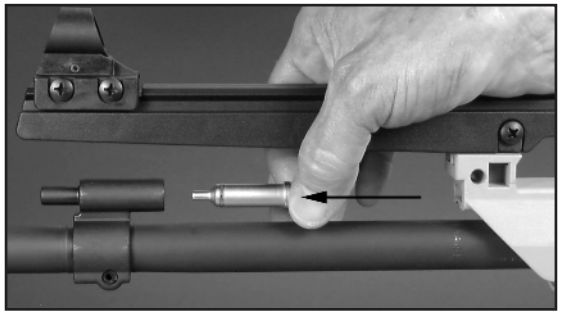

Figure 30 Installing the gas piston

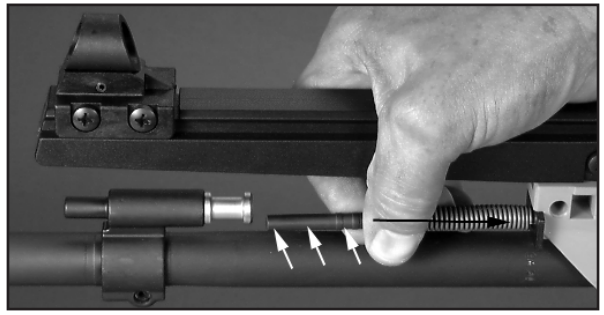

Figure 31 Installing the push rod

Assembly of the SL8-1

1 • Slide the handguard from the front over the barrel and the receiver. Align notches onto studs.
2 • Fasten the handguard with the locking pin.
3 • Place the front of the magazine well onto the bearing studs, swivel the rear of the magazine well upward all the way until it engages the magazine catch.
4 • Insert the bolt assembly from the rear into the receiver together with the recoil spring.
5 • Push buttstock assembly with trigger mechanism (hammer is back, in the cocked position) from the rear into the receiver and insert the locking pin above the trigger guard.
6 • Fasten the buttstock to the receiver by the means of the allen screws with the HK Tool (do not use excess force to tighten them down).
7 • Set the SL8-1 safety/selector on “Safe!”
8 • Insert the magazine.

DISASSEMBLY & ASSEMBLY OF THE MAGAZINE

Disassembly of the magazine

1 • Press the bottom of the right sidewall of the magazine inward until the front catch is disengaged.
2 • Push the magazine floor plate to the rear.
3 • Press the bottom of the right sidewall inward until the rear catch is disengaged.
4 • Remove the floor plate to the rear.

WARNING: The magazine spring is under pressure! Remove the magazine spring and the follower from the bottom of the magazine while holding the magazine with the bottom pointed downward.

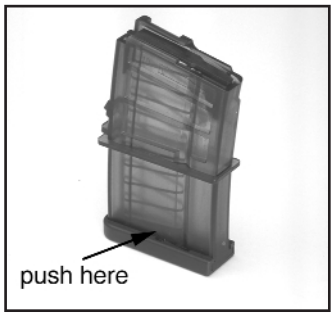

Figure 32
Press magazine sidewalls

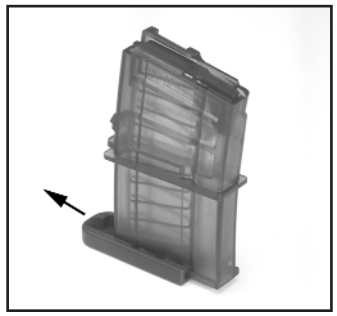

Figure 33
Remove floor plate

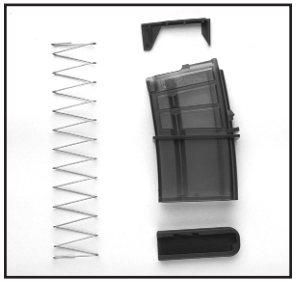

Figure 34 Magazine disassembled

Assembly of the magazine

1 • Insert the follower and the magazine spring from the bottom into the magazine housing.
2 • Slide the magazine floor plate from the rear onto the magazine housing.
3 • Push the magazine floor plate all the way over the two catches onto the magazine housing.

ADJUSTMENT OF THE STOCK & CHEEKPIECE

Buttstock adjustments

Cheekpiece and buttplate can be adjusted by means of removable spacers to the user's preference.

Adjustment of buttstock length

1 • Use the 5mm allen wrench of the HK Tool to remove the hex head screw on the left and right side of the rear of the buttstock assembly.
2 • Pull buttplate with spacer back out of the buttstock.

Figure 35 Remove buttplate with spacer

3 • To adjust the buttstock length to your requirement you can use up to five spacers. Each spacer is 10 mm (approximately 1/2 inch wide). Maximum adjustment is 2 inches.
4 • Push back buttplate with the required number of spacers into the buttstock and fasten the two hex head screws with the HK Allen wrench.

NOTE: The buttstock can be set at any length without the use of optional spacers by using the two hex head screws to secure the buttplate in position.

ADJUSTMENT OF THE STOCK & CHEEKPIECE

Adjustment of the cheekpiece

1 • Use the Phillips screwdriver of the HK Tool to remove the two Phillips screws from the cheekpiece.
2 • You can use the cheekpiece alone or with up to two spacers.
3 • Tighten the cheekpiece with or without spacers to the buttstock by using the Phillips screwdriver.

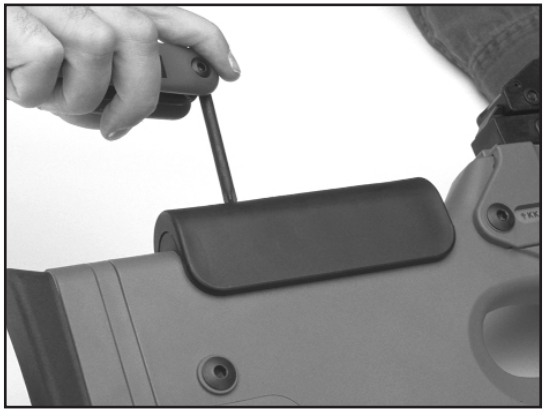

Figure 36 Adjustment of cheekpiece

ADJUSTMENT OF THE SIGHTS

Sight Adjustments

If the point of impact of several shots does not coincide with where you aimed, a sight adjustment is necessary. The SL8-1 is zeroed at 100 meters point of aim point of impact using the 100 meter rear sight aperture. For zeroing, select the 100 meter rear sight aperture.

Elevation Adjustment

- If shots are high, elevation adjustment screw is turned clockwise with the 2.5 mm Allen wrench of the HK Tool.
- If shots are low, turn the screw counterclockwise.
- A full turn of the adjustment screw will move the point of impact 11 cm or 4-1/2 inches up or down at a distance of 100 meters.

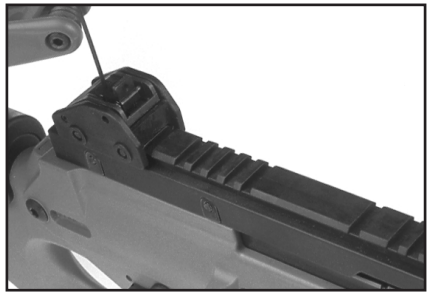

Figure 37 Elevation Adjustment

Windage Adjustment

- If shots are right of the point of aim, use the 2 mm Allen wrench and turn the windage adjustment screw clockwise.
- If shots are to the left of the point of aim, turn the windage adjustment screw counterclockwise.
- One click of the side adjustment screw moves the point of impact 3.3 centimeters (or 1-1/4 inches) left or right.

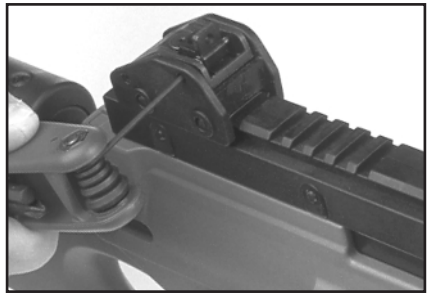

Figure 38 Windage Adjustment

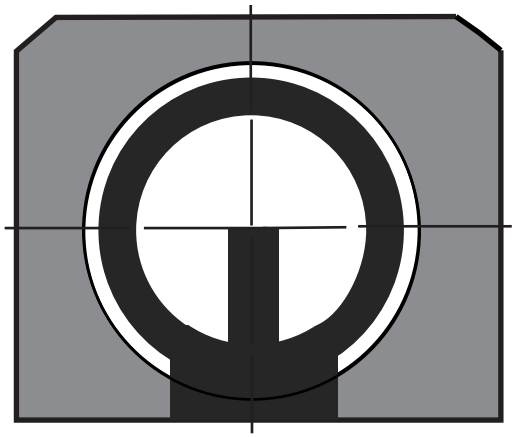

Figure 39 Proper sight alignment

NOTE: When engaging targets that are 300 meters away, flip the 300 meter rear sight aperture into position to account for the drop in the trajectory of the projectile.

Optical sight with 3x magnification
Instead of the standard iron sights, an optional optical sight with 3x magnification can be used on the SL8-1.

The sight comes with 2 Phillips screws, 2 spacers and 2 threaded washers, to be mounted to the rail after removing front and rear sight.

Figure 40 Optical Sight

Optical Sight Reticle
The reticle of the optical sight is provided with range marks from 200 to 800 meters in increments of 200 meters.

The outer lateral surfaces of the circular reticle simultaneously serve as lead marks when aimed at laterally moving targets, moving at approximately 15 km/h (9m/h) speed at a range of 200 meters.

The interior diameter of the circular reticle corresponds to a target with a height of 1.75 meters (or 5.5 feet) at a 400 meter range.

The range marks at the bottom left which help to find and set the range at 200, 400 and 800 meters are also based on a target sized about 1.75 meters (5.5 feet).

In the same manner, the heights of the crossmarks at 600 m and 800 m correspond to a target of approximately 1.75 m (5.5 feet) height at the respective range.

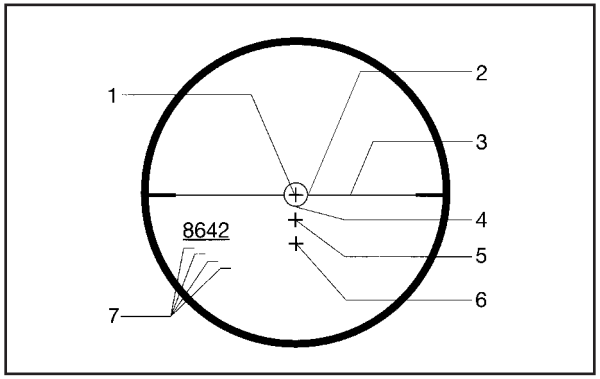

Figure 41 Optical reticle

1 Point of aim at 100 and 200 meters.
2 Lead mark for firing at targets moving from left to right at a speed of approx. 15 km/h (9 mph) at a range of 200 meters.
3 Horizontal line to determine whether rifle is canted.
4 Circular reticle (interior diameter = 1.75 meters/5.5 feet size target at 400 meter target range) and aiming point approx. 400 meter range.
5 Point of aim for firing at 600 meter range.
6 Point of aim for firing at 800 meter range.
7 1.75 meters/5.5 feet size target at ranges X.

Adjustment of the optical sight
If a sight adjustment becomes necessary, this may be done by vertically or horizontally adjusting the optical sight with the 2.5 mm Allen wrench from the HK Tool.

Elevation Adjustment
- If the weapon's point of impact is too high, turn the top adjusting screw counter-clockwise in the direction of the "T."
- If the weapon's point of impact is too low, turn the top adjusting screw clockwise in the direction of the "H."

NOTE: One graduation changes the point of impact by approx. 2.3 centimeters (1.0 inch) at a range of 100 meters

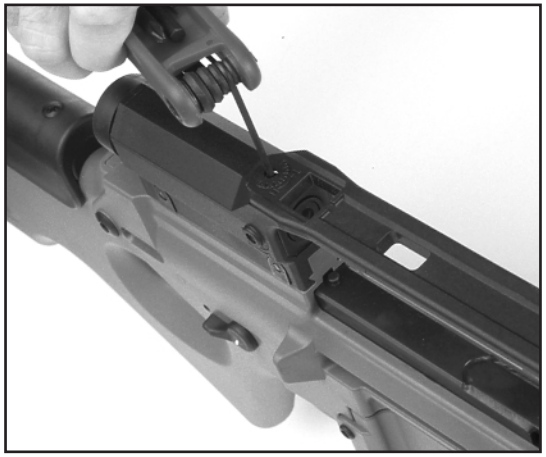

Figure 42Optical sight elevation adjustment on the SL8-1

Windage Adjustment
- If the weapon's point of impact is too far to the right, turn the windage adjusting screw counter clockwise in the direction of the "L."
- If the weapon's point of impact is too far to the left, turn the windage adjusting screw clockwise in the direction of the "H."

NOTE: One graduation changes the point of impact by approx. 2.3 centimeters (1.0 inch) at a range of 100 meters

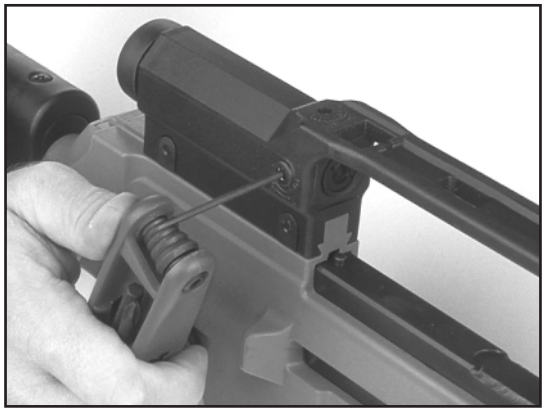

Figure 43 Optical sight windage adjustment on the SL8-1

Cleaning and Preservation

To clean and maintain the SL8-1 self-loading rifle you may use:

- The HK cleaning kit caliber .223/5.56 mm
- Off the shelf cleaning kits caliber .223/5.56 mm
- Cotton patches and soft tissue
- Chloride and acid-free cleaning and preservation fluids

NOTE: Do not use steel tools or brushes to clean your SL8-1 or synthetic materials like nylon when the weapon is hot. Keep cleaning solvents away from the painted surfaces of the SL8-1, to include the safety/selector and the "safe" and "fire" symbols. Proper cleaning and maintenance of your SL8-1 will extend the life of the rifle.

Normal Cleaning

You should do this after every firing of the gun:

1 • Remove magazine
2 • Set the SL8-1 safety/selector lever to "safe" and ensure the chamber is clear
3 • Use nylon brush and soft tissue to clean the outside
4 • Lock bolt to the rear and run a bronze bristle bore brush soaked with solvent several times through the barrel; follow with clean patches
5 • Apply a light coat of oil to the barrel
6 • Following cleaning, check function of all parts
7 • Set the SL8-1 safety/selector lever on "safe"

Major Cleaning (To be conducted after firing 1,000 rounds or if exposed to or submerged in water):

1 • Clean chamber and barrel extension with chamber brush caliber .223/5.56 mm
2 • Take bolt group apart and clean its parts
3 • Disassemble the gas system and clean the gas piston
4 • Field strip magazine and clean it
5 • Apply light coat of oil to all moving parts including the metal rails in the receiver
6 • Reassemble the SL8-1 and check function
7 • Set the SL8-1 safety/selector lever on "safe"

HK SL8-1 Combination Tool:
All the necessary tools to adjust and field strip the SL8-1 are part of the HK combination tool.

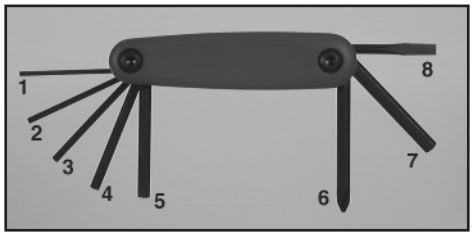

Figure 44 HK Combination Tool

1. Allen wrench 2 mm (iron sight, windage adjustment)
2. Allen wrench 2.5 mm (iron sight, elevation adjustment, Optical sight, adjustment)
3. Allen wrench, 3 mm
4. Allen wrench, 4 mm
5. Allen wrench, 5 mm (Allen head screws buttstock/receiver and buttplate adjustment)
6. Phillips screwdriver (cheekpiece adjustment)
7. Allen wrench, 6 mm
8. Screw driver, 5 mm

NOTE: Failure to use these metric tools may cause damage to the SL8-1 screws.

Stoppages and Malfunctions

In the event of stoppages on the SL8-1, the weapon is to be considered loaded until the actual cause of the stoppage has been determined. During the elimination of stoppages, safety precautions are to be taken into account.

If in the event of stoppages on the SL8-1, the cartridge fired from the SL8-1 is not ignited; the bolt assembly does not close completely; or the spent cartridge case is not ejected; then the following steps must be taken immediately

1 • Put the SL8-1safety/selector lever on “Safe”
2 • Remove the magazine
3 • Unload the SL8-1
4 • Ensure that barrel, cartridge chamber and receiver are free of obstacles
5 • Determine and eliminate the cause of the stoppage

Stoppage, Fault	Cause	Remedy
Cartridge is not ignited (dud round)	Ammunition fault (dud)	Recock SL8-1
	Tip of firing pin damaged or broken	Contact HK for repair
	Hammer spring damaged or broken	Contact HK for repair
Bolt fails to open after being fired	Cartridge case stuck in chamber due to deform-ation or dirty chamber	Unload: retract bolt to eject cartridge case, clean if fouled. If required, contact HK for repair
	Gas system fouled or defective	Clean gas piston. If required, contact HK for repair
Bolt does not close completely, cartridge not properly seated	Cartridge chamber dirty	Clean chamber
	Barrel extension dirty	Clean barrel extension
	Cartridge damaged	Replace cartridge
	Recoil spring worn	Contact HK for repair
	Incomplete cocking movement	Release cocking lever. Let it snap forward without riding it forward.

Stoppage, Fault	Cause	Remedy
Cartridge case not extracted or ejected	Chamber dirty	Clean chamber
	Extractor or or extractor spring broken	Contact HK for repair
	Ejector or ejector spring damaged	Contact HK for repair
	Insufficient bolt recoil	Unload: Use cocking lever to retract bolt. Remove cartridge case. Check for smooth operation and check chamber for fouling. If required, clean chamber.
No cartridge fed by bolt	Magazine not properly inserted or engaged.	Insert magazine properly
	Magazine loose	Check magazine catch and lugs on magazine housing. If required, contact HK for repair.
	Follower spring worn	Replace or repair magazine
	Magazine lips damaged	Magazine housing damaged. If required contact HK for repair.
	Magazine well damaged	Return magazine well to HK for repair
Bolt does not stay open after last shot	Magazine follower spring worn	Replace magazine follower, or spring
SL8-1 trigger cannot be pulled with hammer cocked	Sear broken or compression spring worn	Contact HK for repair
Magazine stuck in magazine well	Magazine damaged	Replace magazine
	Magazine catch defective	Contact HK for repair

PARTS LIST & EXPLODED DIAGRAM

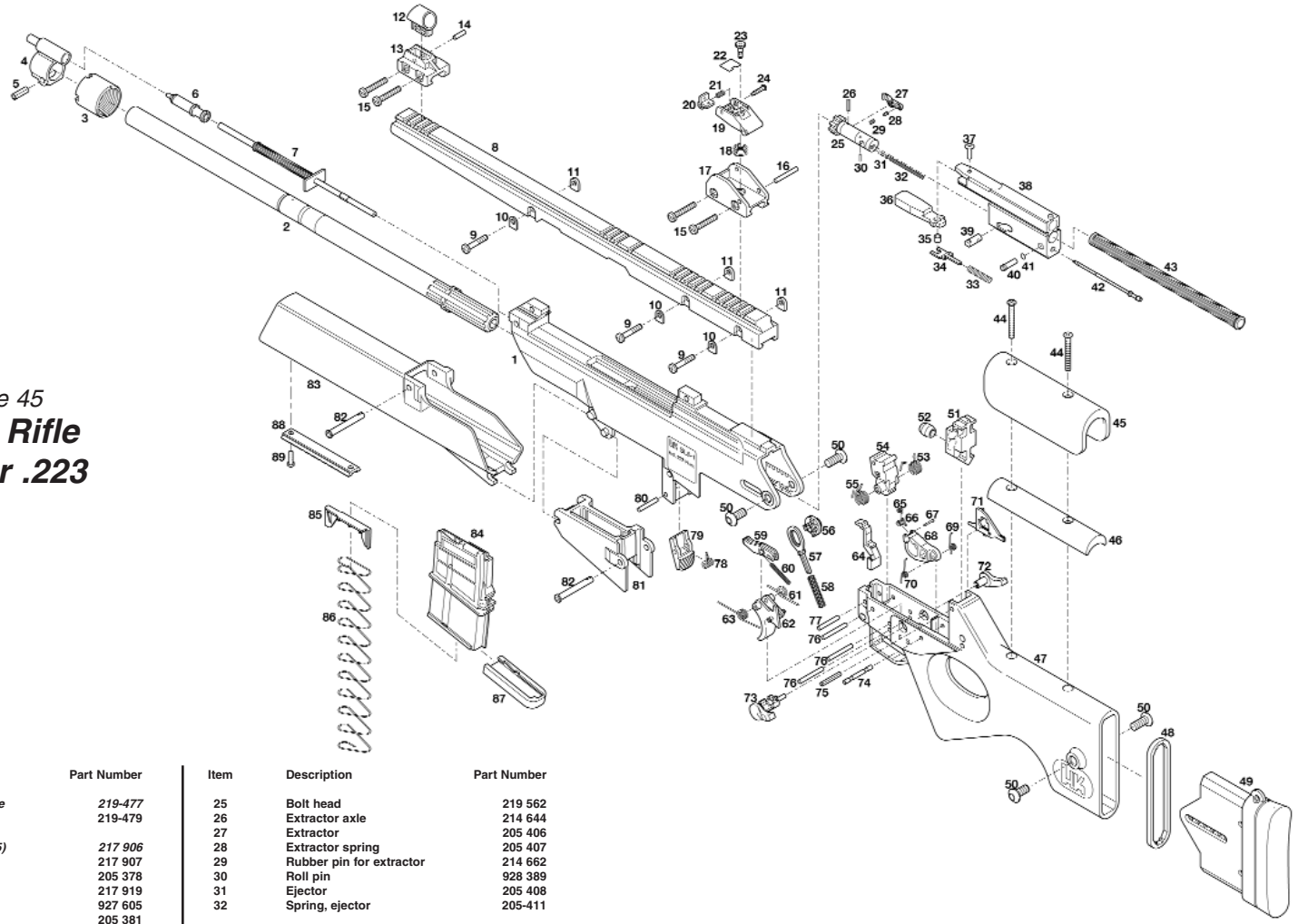

Figure 45

SL8-1 Rifle
Caliber .223

Item	Description	Part Number
	Rifle, SL8-1 complete	*219-477*
1	Housing	219-479
	Barrel, complete (2-5)	*217 906*
2	Barrel	217 907
3	Barrel retaining nut	205 378
4	Gas block	217 919
5	Roll pin, gas block	927 605
6	Piston, complete	205 381
7	Piston rod, complete	205 384
8	Mounting Rail	217 947
9	Flat Headed Screw (3x)	986-785
10	Washer (3x)	214 112
11	Threaded Washer	214 113
	Front sight, complete (12-14)	*217 933*
12	Front sight	217 796
13	Front sight base	217 795
14	Roll pin, front sight	928 747
15	Flat headed screw (4x)	988 428
	Rear sight complete (16-24)	*217 925*
16	Roll pin, rear sight	987 695
17	Rear sight guard	217 992
18	Spring, elevation adjustment	217 504
19	Rear sight housing	217 991
20	Rear sight aperture	217 997
21	Spring, windage adjustment	217 518
22	Flat Spring	217 515
23	Screw, elevation adjustment	217 505
24	Screw, windage adjustment	217 517
	Bolt complete (25-42)	*219 560*
	Bolt head, complete (25-32)	*219 561*

Item	Description	Part Number
25	Bolt head	219 562
26	Extractor axle	214 644
27	Extractor	205 406
28	Extractor spring	205 407
29	Rubber pin for extractor	214 662
30	Roll pin	928 389
31	Ejector	205 408
32	Spring, ejector	205-411
	Bolt head carrier complete (33-38)	*217-909*
33	Spring, cocking handle	205 393
34	Fork	205 394
35	Bushing	205 473
36	Cocking handle	205 395
37	Rivet	205 210
38	Bolt carrier	217 910
39	Cam Pin	205 390
	Firing pin retainer, complete (40-41)	*205 412*
40	Firing pin retainer	205 413
41	O-ring, firing pin retainer	983 411
42	Firing pin	205 391
43	Recoil spring complete	205 445
	Buttstock assembly complete (44-76,79)	*219 535*
44	Screw for check rest (2x)	988 372
45	Cheekpiece	217 948
46	Cheekpiece spacer	217 916
47	Buttstock	219 538
48	Spacer, Buttplate	219 537
49	Buttplate complete	219 539
50	Allen Screw, Buttstock (4)	217 903
51	Back plate	219 536

Item	Description	Part Number
52	Buffer	205 452
53	Hammer spring, right	205 428
54	Hammer	217 936
55	Hammer spring, left	205 429
56	Notched disk	217 614
57	Index plate	205 419
58	Compression spring	205 418
59	Sear complete	205 439
59a	Slide	219 411
60	Sear spring	217 917
61	Trigger spring	217 918
62	Trigger	217 934
63	Bolt catch spring	205 466
64	Bolt catch	214 879
	Locking lever, complete	*219 094*
65	Locking lever spring	214 616
66	Locking lever	219 095
67	Bolt	214 615
68	Locking lever	214 613
69	Elbow spring, right	217 946

Item	Description	Part Number
70	Elbow spring, left	205 201
72	Safety lever, right	205 437
73	Safety lever, left	217 945
74	Recessed axle	205 202
75	Clamping pin	988 371
76	Axle (3x)	205 469
77	Actuator axle	205 424
78	Magazine release spring	205 369
79	Magazine release	205 368
80	Axle	205 469
81	Magazine well	219 478
82	Locking pin, complete (2x)	214 125
83	Hand guard complete	219 551
	Magazine complete (10 rounds)	*219 472*
83	Magazine Housing	219 473
84	Follower	219 474
85	Follower spring	219 475
86	Magazine floor plate	219 476
	HK Combination Tool	988 49

SL8-1 SPECIFICATIONS

Caliber	.223 Remington
Operating Principle	Gas operated, short stroke piston, rotary locking bolt
Mode of Fire	Semi-automatic
Feed Device	Single-stack polymer magazine, 10-round capacity
Sights	Adjustable iron sights. and detachable MIL-STD-1913 rail available for the attachment of accessory targeting devices
Rifling	6X lands & grooves, right hand twist, I turn in 7 inches
Length (overall)	38.58 inches (980 mm)
Barrel Length	20.80 inches (528 mm)
Sight Radius	17.65 inches (448 mm)
Width (overall)	2.36 inches (60 mm)
Height (overall)	9.84 inches (250 mm) with 10-rd magazine
Weights	
• Overall	8.60 pounds (3.9 kilograms with magazine)
• Magazine	2.47 oz. (70 grams) 10-round, empty

FIREARM SERVICE RECORD

SL8-1 Rifle Serial Number _____

Date	Number of Rounds Fired	Cumulative Total of Rounds Fired	Users Name	Maintenance & Remarks

In a world of compromise, some don't.

HK USA #701475 5/00

Remember, firearms safety begins with you. Read and follow all safety information in the operators manual. Store all firearms in a safe and secure location. Keep firearms away from children. Always be a safe shooter.

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